

CASE AND COMMENTARY: PEER-REVIEWED ARTICLE

Should a Physician Ever Violate SWAT or TEMS Protocol in a Mass Casualty Incident?

Brandon Morshedi, MD, DPT and Faroukh Mehkri, DO

Abstract

Mass casualty incidents involving active shooters are becoming more common, and many involve special weapons and tactics team responses. Standard of care is to have tactical emergency medical services paramedics or physicians direct triage and administer immediate interventions. In these situations, a clinical and ethical value is to do the greatest good for the greatest number of people. Cases in which beneficence and justice are at odds are particularly complex. This commentary on such a case argues that directing resources to patients most likely to survive accords triage principles and explores ethical complexity in resource allocation decisions.

Case

After hours of talking, negotiations break down and, in the worst possible scenario, bullets ring as a shooter indiscriminately fires several rounds in a local business place and takes hostages. Law enforcement officers immediately make emergent entry into the building and engage the shooter. The shooter collapses, gunfire ceases, and officers rush to ensure that the shooter is contained. Additional law enforcement personnel begin to search and secure the scene. Due to staging until the scene is determined safe, combined with lack of protective armor and helmets, the nearest ambulance is 2 blocks away and stays back until ordered in by law enforcement.

The tactical emergency medical services (TEMS) physician, Dr M, who is embedded within the special weapons and tactics (SWAT) team, enters and begins performing rapid triage of the patients who lie at the scene. Dr M notes 6 dead; 1 law enforcement officer who sustained a gunshot wound to the chest is unconscious, not breathing, and has a weak pulse; 1 civilian who sustained extensive injury by a gunshot wound to the right side of the neck is unconscious, with heavy bleeding, agonal respirations, and weak pulse; and 1 suspect who sustained a gunshot wound to the high right lateral chest is awake with minimal bleeding and significant respiratory distress.

Dr M's heart sinks. Clinical and ethical principles of triage and protocol in this case suggest that lifesaving efforts should first be directed towards the suspect according to the Sort-Assess-Lifesaving Interventions-Treatment and/or Transport (SALT) mass

casualty triage algorithm.^{1,2} Dr M does, however, have equipment available to attempt to save either the law enforcement officer or the civilian, although either attempt is unlikely to be successful. Dr M decides which patient to approach first.

Commentary

Mass casualty incidents (MCIs) involving **active shooters** are becoming more common today,³ and several scenarios involve SWAT team responses. These teams are increasingly recognizing that the standard of care is to have specially trained TEMS paramedics or physicians to direct triage and administer immediate interventions to those in need. In these situations, a basic principle is to do the greatest good for the greatest number of people. But when principles of beneficence and justice are at odds, a TEMS clinician is required to make an ethically difficult decision. We explore ethical complexity in resource allocation decisions and argue that triage principles dictate that resources be directed to those most likely to survive.

Disaster and Triage Tools

The World Health Organization (WHO) defines MCIs as “disasters and major incidents characterized by quantity, severity, and diversity of patients that can rapidly overwhelm the ability of local medical resources to deliver comprehensive and definitive medical care.”¹ In simpler terms, an MCI is any crisis requiring more resources than are available. In this case, with 3 critical patients and only 1 responder, it could be argued that the current resources to provide acceptable care are insufficient and thus meet the WHO definition of an MCI disaster. Allocation of limited resources to one patient over another during an MCI is dictated by **triage principles** and algorithms (see Table 1). Of note, while a triage tool might be chosen for its perceived superiority in accuracy or time of implementation, it is commonly chosen based on local preferences, training, and familiarity.

Table 1. Examples of Mass Casualty Incident Triage Tools^a

Simple Triage and Rapid Treatment (START)
JumpSTART
Sort-Assess-Lifesaving Interventions-Treatment and/or Transport (SALT)
Sacco Triage Method (STM)
Care Flight Triage
Secondary Assessment of Victim Endpoint (SAVE)
BLS-Logistics-ALS-Situational Triage (BLAST)

Abbreviations: BLS, basic life support; ALS, advanced life support.

^a Pepper, Archer, Malhoney⁴; Jenkins, McCarthy, Sauer, et al⁵; Heightman.⁶

The SALT triage algorithm is commonly used to stratify patients based on injury severity. While teaching more about this algorithm is beyond the scope of this article, it is important to note that it is endorsed by several national organizations² and results in patients being sorted into 5 groups: (1) minimal (green), (2) delayed (yellow), (3) immediate (red), (4) expectant (gray), or (5) dead (black). In the case, use of the SALT algorithm would result in patients being sorted as follows:

1. The law enforcement officer would be categorized as *dead*, even though a weak pulse is present.
2. The civilian would be categorized as *expectant*, meaning that person will likely soon die, even if treatment were provided.
3. The suspect would be categorized as *immediate*, meaning that if rapid treatment is provided, there is improved likelihood of survival.

TEMS responders have no rights or authority to assess and treat patients outside of MCI protocols, such as SALT, which allocate care based on needs. Incidents involving multiple patients spread over a large area, as in many MCI or SWAT incidents, generate more challenges for a TEMS responder attempting to allocate limited resources; a responder's assessment based on need alone is important.⁷ According to triage principles, a trained responder should not use limited resources on individuals who would likely die regardless of lifesaving efforts. In this case, following accepted standards and protocols, beneficence dictates that the suspect should receive Dr M's care, on the grounds that it would be better to save at least one person than to attempt to save the officer or civilian, which would likely lead to the deaths of all 3 individuals.

Balancing Beneficence and Justice

The World Medical Association's "Statement on Medical Ethics in the Event of Disasters" states:

The decision not to treat an injured person on account of priorities dictated by the disaster situation cannot be considered an ethical or medical failure to come to the assistance of a person in mortal danger. It is justified when it is intended to save the maximum number of individuals.... The physician must act according to the needs of patients and the resources available. He/she should attempt to set an order of priorities for treatment that will save the greatest number of lives and restrict morbidity to a minimum.⁸

Health care professionals, in any setting, seek to relieve suffering and preserve life, guided by the ethical principles of nonmaleficence (do no harm), beneficence (act in the best interest of others), respect for autonomy (self-determination), and justice (fairness and equitable allocation of resources).⁹ Beneficence would dictate that resources should be allocated to save those most likely to survive (the suspect, in this case); justice, however, suggests that treating a suspect and withholding treatment (and chance of survival) from innocent victims is unfair.

As mentioned above, objective application of standard triage and treatment protocols would favor beneficence: the TEMS responder would determine that the suspect would benefit most from immediate care and has the highest likelihood of survival among the patients. Given that the law enforcement officer and civilian have very little chance of surviving their injuries even with rapid care, it would be harmful to the suspect to divert resources or efforts to others. Furthermore, it could be argued that it would be unethical *not* to treat the suspect, as some might argue that the suspect, since not yet proven guilty, deserves a chance at life-sustaining treatment or that even a guilty perpetrator is no less deserving of care than an innocent victim. An objective TEMS responder would simply perform their role in saving those who can be saved, regardless of the patients' circumstances.

Yet it should be noted that beneficence entails a limited duty, unlike nonmaleficence, which is often considered a perpetual duty.¹⁰ For example, physicians have a duty to try

to benefit any or all of their patients but might choose who becomes their patient in the first place. As a result, there is no duty towards persons not considered patients, with whom there is no established patient-physician relationship—including, in this case, the suspect and officers. In the case, conflict between benevolence and justice arises because there is more than one patient in need. Since the triage principles don't account for fairness, Dr M might feel torn between following protocol to treat the suspect and breaking protocol to provide likely ineffective treatments for known innocents.

In situations with multiple victims, the National Tactical Officers Association's safety priorities can influence TEMS responders' triage decisions. According to this guidance, a TEMS responder must prioritize (1) hostages, (2) innocent civilians, (3) law enforcement, and (4) suspects. This order is not based on value of one life over another but suggests that whoever is most imperiled should be accorded beneficence.¹¹ For example, hostages, in contrast to suspects, have little or no ability to remove themselves from or affect outcomes of a situation. Because officers sometimes knowingly risk their own safety to save innocents' lives, they understand that a TEMS responder would likely try to save a hostage or civilian first.

Different priorities would be yielded by applying Beauchamp and Childress' 6 material principles (see Table 2) that inform **just resource distribution**.⁹ In the case, principles 3, 4, and 5 would seem to suggest that Dr M should direct lifesaving efforts to the civilian or the law enforcement officer rather than the suspect, since they neither contributed to nor deserve their current predicament.

Table 2. Material Principles of Justice^a

- | |
|--|
| 1. "To each person an equal share." |
| 2. "To each person according to need." |
| 3. "To each person according to effort" |
| 4. "To each person according to contribution" |
| 5. "To each person according to merit" |
| 6. "To each person according to free market exchanges" |

^a Beauchamp TL, Childress JF.⁹

Crises are further complicated if additional victims (especially children, pregnant women, or elders) are in the same triage category as—or are worse off than—the suspect. A TEMS responder who categorizes victims as dead or expectant and then cares for the suspect might experience conflict, with accompanying psychological or moral repercussions.¹² Had this case included such victims, Dr M might have applied the principles of justice and beneficence differently and then triaged differently.

Training and Objectivity

While decisions about whom to treat in a case such as this have the potential to be emotionally overwhelming, thereby clouding objectivity, it is important to understand that triage protocols exist to promote standard of care across a variety of ethically and clinically complex situations. Following triage protocols can support ethical and legal

defense of one's decisions in MCI situations or in other unusual tactical health cases. A TEMS responder is trained to practice objectivity when assessing and delivering care in austere environments and conditions. Doing the greatest good for the greatest number can only follow hard decisions about precious resource allocation.^{10,13,14,15,16}

Making more resources available would help alleviate some decisional stress, especially for rapid treatment. Cross-training law enforcement officers to perform basic maneuvers and medical procedures and cross-training paramedics and physicians in law enforcement techniques, tactics, and practices would also help expand the resources available for MCIs and obviate the need for triage to some extent. In the end, the only way to avoid making difficult ethical decisions in MCIs is, as described here, to either increase resources or avoid MCIs altogether, which is often out of our control.

References

1. Clarkson L, Williams M. EMS mass casualty triage. In: *StatPearls*. StatPearls Publishing; 2021. Accessed March 22, 2021. <https://www.ncbi.nlm.nih.gov/books/NBK459369/>
2. SALT mass casualty triage: concept endorsed by the American College of Emergency Physicians, American College of Surgeons Committee on Trauma, American Trauma Society, National Association of EMS Physicians, National Disaster Life Support Education Consortium, and State and Territorial Injury Prevention Directors Association. *Disaster Med Public Health Prep*. 2008;2(4):245-246.
3. Quick look: 277 active shooter incidents in the United States from 2000 to 2018. Federal Bureau of Investigation. Accessed March 24, 2021. <https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-incident-graphics>
4. Pepper M, Archer F, Moloney J. Triage in complex, coordinated terrorist attacks. *Prehosp Disaster Med*. 2019;34(4):442-448.
5. Jenkins JL, McCarthy ML, Sauer LM, et al. Mass-casualty triage: time for an evidence-based approach. *Prehosp Disaster Med*. 2008;23(1):3-8.
6. Heightman AJ. The BLAST approach: rethinking the way we approach MCI triage. *J Emerg Med Services*. April 1, 2018. Accessed October 27, 2021. <https://www.jems.com/patient-care/the-blast-approach-rethinking-the-way-we-triage/>
7. Assistant Secretary for Preparedness and Response Technical Resources, Assistance Center, and Information Exchange. Mass casualty trauma triage: paradigms and pitfalls. US Department of Health and Human Services; 2019. Accessed March 22, 2021. <https://files.asprtracie.hhs.gov/documents/aspr-tracie-mass-casualty-triage-final-508.pdf>
8. WMA statement on medical ethics in the event of disasters. World Medical Association. Adopted September 1994. Revised October 2017. Accessed March 23, 2021. <https://www.wma.net/policies-post/wma-statement-on-medical-ethics-in-the-event-of-disasters/>
9. Beauchamp TL, Childress JF. *Principles of Biomedical Ethics*. 8th ed. Oxford University Press; 2019.
10. McCormick TR. Principles of bioethics. Department of Bioethics and Humanities, University of Washington School of Medicine. Accessed March 23, 2021. <https://depts.washington.edu/bhdept/ethics-medicine/bioethics-topics/articles/principles-bioethics>

11. NTOA tactical response and operations standard. National Tactical Officers Association. Accessed July 23, 2021. <https://www.ntoa.org/swat-standard/>
12. Ciotto GR, ed. *Disaster Medicine*. 2nd ed. Elsevier; 2006.
13. Adams DB. Improving combat casualty care with a triage score. *Mil Med*. 1988;153(4):192-196.
14. Pesik N, Keim ME, Iserson KV. Terrorism and the ethics of emergency medical care. *Ann Emerg Med*. 2001;37(6):642-646.
15. Frykberg ER. Medical management of disasters and mass casualties from terrorist bombings: how can we cope? *J Trauma*. 2002;53(2):201-212.
16. Kennedy K, Aghababian RV, Gans L, Lewis CP. Triage: techniques and applications in decision making. *Ann Emerg Med*. 1996;28(2):136-144.

Brandon Morshedi, MD, DPT is an associate professor of emergency medicine and associate division chief in the Division of Emergency Medical Services at the University of Texas Southwestern Medical Center in Dallas. He serves as the deputy medical director for the City of Dallas Fire-Rescue Department and as the assistant medical director, a reserve specialist, and a tactical physician for the Dallas Police Department SWAT team.

Faroukh Mehkri, DO is an assistant professor of emergency medicine in the Department of Emergency Medicine at the University of Texas Southwestern Medical Center in Dallas. He serves as a sworn officer for the City of Dallas and as a tactical physician and tactical medical officer for the Dallas Police Department SWAT team. He also serves as the chair of the Tactical EMS Track for the Special Operations Medical Association.

Editor's Note

The case to which this commentary is a response was developed by the editorial staff.

Citation

AMA J Ethics. 2022;24(2):E120-125.

DOI

10.1001/amajethics.2022.120.

Conflict of Interest Disclosure

The author(s) had no conflicts of interest to disclose.

The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental. The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.

Copyright 2022 American Medical Association. All rights reserved.
ISSN 2376-6980